## GUIDELINES FOR FOREIGN EXCHANGE RESERVE MANAGEMENT

Accompanying Document and Case Studies

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## **Executive Summary**

- 1. This document has been developed to accompany the Guidelines for Foreign Exchange Reserve Management that were approved by the Executive Board of the International Monetary Fund in September 2001.
- 2. The country case studies presented in this document illustrate the range of practices adopted and the evolution that has taken place in the areas of reserve management covered by the Guidelines. In contrast to a decade or two ago, there has been increased focus on efficient management of reserves, more disclosure of information on reserves operations, greater clarity and accountability in the decision-making process, wider use of sophisticated risk management techniques, including use of derivatives and application of more advanced technology for information processing. Table 1 (p. 30) lists country examples of key reserve management practices (in terms) of the areas covered by the Guidelines.
- 3. Countries hold reserves to support a range of objectives, the most common being the use of reserves as a tool for exchange rate or monetary policy, and for reducing external vulnerability. Even in countries with floating exchange rate regimes, reserves are held as a buffer to manage exchange rate volatility. Another important objective of holding reserves for many countries is to provide confidence to markets.
- 4. The basic traditional objectives of reserve management, namely, those of security, liquidity,

- and then return, are apparent across all case studies. However, increasingly the focus is on managing reserves more efficiently in order to maximize returns (or reduce costs) while preserving capital and liquidity. In many cases, this shift in focus is due to an increase in the size of reserves and a change in the approach to intervention, which give reserve management entities greater latitude in structuring the liquidity and duration of the portfolio.
- 5. Country case studies illustrate a range of strategies being adopted based on the country-specific policy environment. Some countries manage reserves funded by sovereign liabilities and adopt an asset-liability management approach. In many countries, however, sovereign foreign currency debt or short-term external debt is one of the factors determining reserve management strategy.
- 6. Over the last few years, there has been a trend toward greater transparency in disclosing information on reserves and reserve management policy and performance. The degree of transparency, however, varies because some countries consider the disclosure of certain sensitive and confidential information as affecting their flexibility to manage the exchange rate regime or their ability to cope with a crisis.
- 7. In almost all the case study countries, the central bank plays a major role in managing the reserves, regardless of who formally owns them. The central bank manages the reserves either as a principal or as an agent, where the assets are owned

by government. In the latter case, it may manage reserves jointly with the government.

- 8. The structure and delineation of responsibilities have evolved over time along with changes in the nature and approach to reserve management. The internal governance structure for reserve management in all the case study countries reflects a clear division of responsibilities and separation of front and back office functions.
- 9. A major challenge for reserve management entities is information technology development. Considerable financial resources and management time are being devoted to identifying and implementing suitable trading, performance, and risk management systems. In addition, the events of September 11 have reinforced the importance of designing and implementing a business continuity plan.
- 10. The level of sophistication with which risk management function is performed has advanced significantly in recent years, supported by developments and innovations in financial markets and information technology. Almost all the reserve management entities covered by the case studies select a benchmark to reflect the strategic asset allocation and embody the best feasible passive strategy given their risk constraints. An extensive analytical effort is applied to the strategic allocation exercise and benchmark design, including use of optimization models.
- 11. Currency risk is managed by determining optimal currency distribution, which varies based on country-specific circumstances. The interest rate risk is generally defined by modified duration. The duration benchmark in some countries is set to reduce the probability of negative returns at a cer-

- tain confidence level and horizon. Several countries use Value-at-Risk (VaR) either for controlling market risks or for management information purposes.
- 12. All countries surveyed have policies that ensure availability of adequate liquidity at acceptable cost. Half the countries covered by the case studies conduct stress tests for liquidity assessment. The focus is on ensuring adequate liquidity to meet potential sources of demand for reserves. Liquidity risk is managed by specifying constraints and limits on asset classes.
- 13. There is substantial convergence on the techniques of credit risk management, but there are some differences in the nature of credit risk deemed acceptable. Typical instruments include highly rated sovereign bonds, supranational paper, and deposits with rated commercial banks and the Bank for International Settlements (BIS). A large number invest in agencies and some in corporate bonds and equities. Many countries also allow the use of derivatives, mainly for market risk management, although the nature of derivatives allowed varies from country to country.
- 14. A majority of countries allow active management within limits, ranges, tracking error, or VaR limits. Performance is measured on an absolute and relative basis, which includes the use of performance attribution models in some cases.
- 15. While some countries have benefited from the use of external managers for upgrading staff skills or for accessing new markets or instruments, a few countries have reported mixed experiences. More than half the participating case study countries use external managers for reserve management.